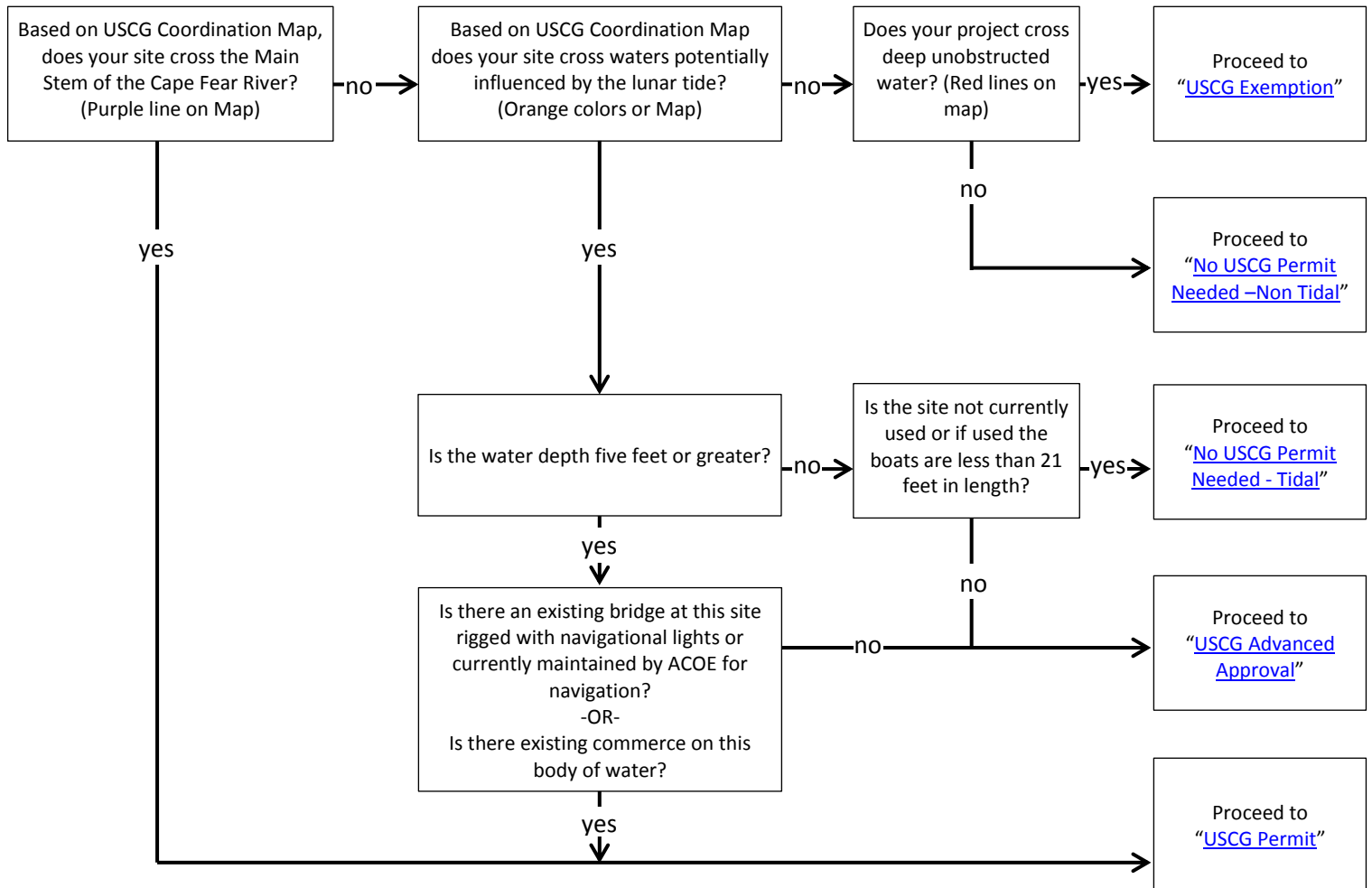


Procedures Addressing Coast Guard Needs for Federally Funded Projects

At the beginning of every project plot the location of each body of water crossed on the [USCG Stream Coordination Map](#) (GIS) and evaluate the crossing through the flowchart below. The outcome boxes in the flowchart below are hyper-linked within this document to the appropriate procedure. The 2nd and 3rd outcomes are authorized under a Programmatic Agreement between FHWA and NCDOT signed in 2015 (see [Programmatic Agreement](#)).



USCG Exemption – Under the Coast Guard Authorization Act the Coast Guard has authority to determine that a project is exempt from a permit:

1. At the time of Start of Study the Project Development Engineer (PDE) will evaluate the bridge and its upstream and downstream conditions and send an e-mail (see [Example E-mail](#) for content) to USCG making the argument that the bridge can be exempted under the Coast Guard Authorization Act.
2. The USCG is requested to respond within 1 months if they concur that no USCG permit is required. Three possible responses are:
 - a. A letter stating USCG agrees the bridge is exempt. The letter will be valid for 5 years from the date of the letter. A [Project Commitment](#) will be required stating that re-affirmation of the exemption will be required if the project does not let within the 5-year window.

- b. The waters at this location are subject to limited recreational navigation. The USCG may require a final structures drawing illustrating that the opening over the navigable channel is being preserved before declaring an exemption. A Project Commitment must be included in the document directing the Natural Environment Section to pick up with this coordination at such a time as the necessary structure drawings are available.
- c. The USCG disagrees that the project qualifies for an exemption under the Coast Guard Authorization Act; proceed to [Advanced Approval](#) or CG Permit process accordingly.

No USCG Permit Needed (Non Tidal) – Under 23 CFR 650.805 this project meets the criteria for projects that FHWA has programmatically determined that a Coast Guard Permit is not needed for this crossing. **If there are multiple projects like this they can be processed simultaneously in one action. The PDE will:**

1. Prepare an 11x17 pdf of the project(s) plotted on the USCG Stream Coordination Map.
2. Prepare an e-mail ([Example E-mail](#)) for FHWA indicating that the project(s) meet(s) the criteria of the Programmatic Agreement and requesting that they notify USCG of the determination.

No USCG Permit Needed (Tidal) – Under 23 CFR 650.805 this project meets the criteria for projects that FHWA has programmatically determined that a Coast Guard Permit is not needed for this crossing. **These projects must be processed individually.** This is an untested category where FHWA is within its legal right to make the call but if USCG disagrees then the project becomes subject to their approval.

1. Prepare an 11x17 pdf of the project plotted on the USCG Stream Coordination Map.
2. Prepare an 11x17 pdf of the project on an aerial photograph (1"=200')
3. A vicinity map
4. Prepare arguments indicating:
 - a. No commerce along this stretch of water.
 - b. That there is either no current usage by boats or if there is usage that the vessels are less than 21 feet in length.
 - c. If there are boats, description of type and size and frequency (Local Bridge Maintenance forces can sometimes provide this type of information).
 - d. Channel characteristics (depth, width, sinuosity)
 - e. Opening under bridge characteristics (# of spans, vertical and horizontal clearance)
 - f. Vicinity Characteristics (Development in the area)
5. This information will go in an e-mail to FHWA who will coordinate with USCG to determine that they agree that no permit is needed. Again, this is an untested process but the process above reflects FHWA's preference. There is no example for this procedure.

USCG Advanced Approval

Follow Procedure for [Preliminary Public Notice](#) (PPN) below. If the results of the of the Preliminary Public notice confirm that Advanced Approval is likely the **PDE** will ensure that the document summarizes coordination with the USCG and the USCG's response letter will be attached to the document. The **PDE** will also place the following commitment into the Greensheet Project Commitments:

***Natural Environment Unit / Structures Management Unit – USCG Advanced Approval**
Based on feedback from the Preliminary Public Notice and coordination with USCG, an Advanced Approval from the USCG is anticipated. The Natural Environment Unit will*

coordinate with the Structures Management Unit, upon completion of their design, to obtain the Advanced Approval for the project.

As the project approaches the twelve month let list the Natural Environment Section (NES) of PDEA will re-generate mailing list from the Preliminary Public Notice, and coordinate with USCG to obtain an Advanced Approval.

USCG Permit

In cases where early coordination between NCDOT/FHWA and USCG results in a determination that a USCG Permit is needed, the PDE should anticipate working with Structures Management Unit and PDEA's Natural Environment Section on the following:

- Vessel Survey
- Vessel Impact Analysis

These will help determine the design parameters of how tall the bridge will be and how sturdy the bridge will have to be built. This is a **HIGHLY NEBULOUS** undertaking so early coordination and frequent communication is required. Typically three needs to be an agreement with USCG on the vertical and horizontal clearances before Roadway Design can proceed with development of the Right of Way plans.

Once agreement is reached on the design parameters, the **PDE** will ensure that the document summarizes coordination with the USCG and the USCG's response letter will be attached to the document. The **PDE** will also place the following commitment into the Greensheet Project Commitments:

***Natural Environment Unit / Structures Management Unit – USCG Coast Guard Permit**
Based on feedback from the Preliminary Public Notice and coordination with USCG, a USCG Coast Guard Permit is anticipated. The proposed bridge must provide the following clearances underneath the bridge..... The Natural Environment Unit will coordinate with the Structures Management Unit, upon completion of their design, to obtain the Advanced Approval for the project.*

Preliminary Public Notice - If the PDE is confident that the project will need either Advanced Approval or a USCG Permit then proceed with the following:

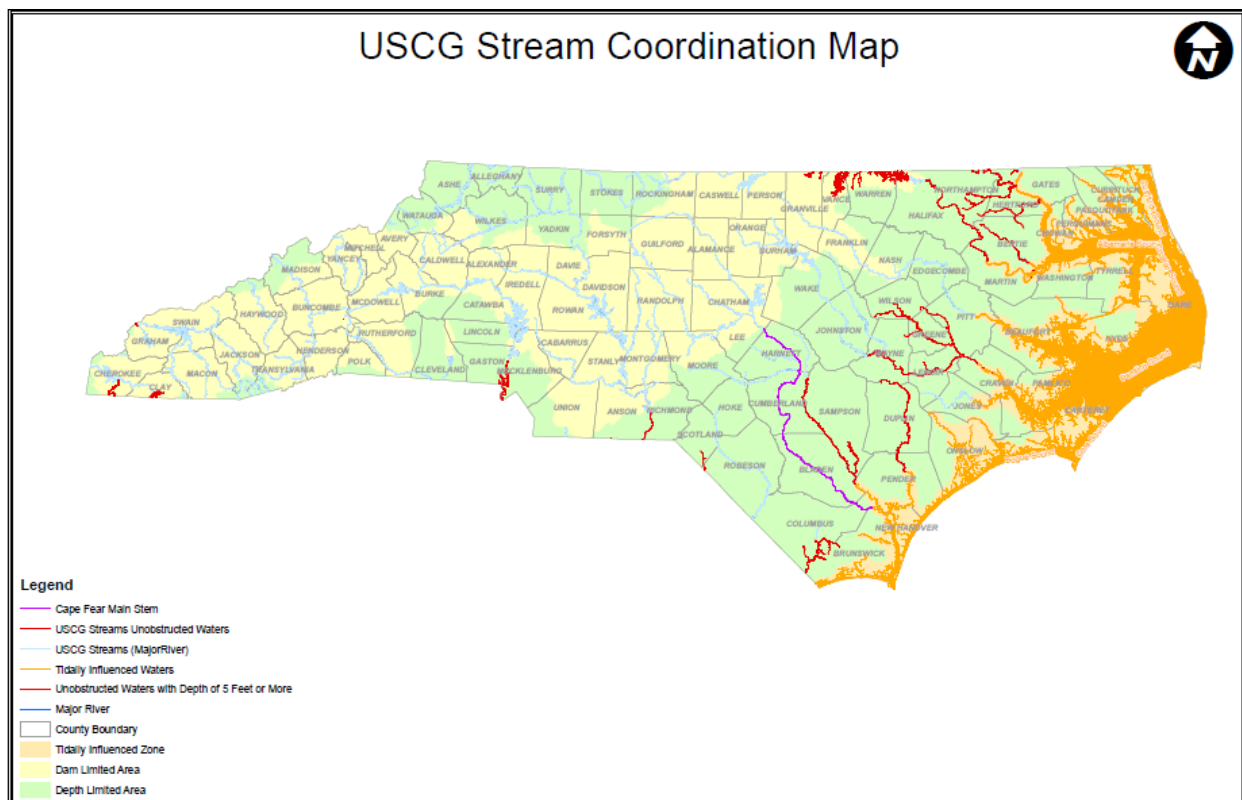
1. At the Scoping Meeting or Field Scoping Meeting (FSM) the PDE will inform the other NCDOT representatives that the proposed bridge has the potential to require a Coast Guard permit. Discuss:
 - a. Maintaining the existing hydraulic opening for the main channel or whether there is a need to lower the existing bridge elevation in order to avoid impacts to the floodplain.
 - b. Whether there is the potential that the bridge will need to provide a larger opening based on the surrounding conditions (e.g. marina upstream, shipping industries, commercial fishing).
 - c. Beginning design immediately following the FSM to reach the BSR in the earliest feasible timeframe. The BSR will be used by the Structures Engineer to develop a Coast Guard drawing required for the Preliminary Public Notice (PPN). The preliminary public

notice allows USCG and NCDOT to collect early information from the public regarding the proposed main channel opening.

2. Request a GIS mailing list of all property holders within a 0.5 mile radius of the bridge location. Use the “Requesting a Mailing List” procedure. The property owners may already be included in a previous GIS mailing list for the project, but verify to make sure. The PDE may need to add additional businesses / addresses which may show or have shown interest outside of the 0.5 mile radius.
3. Prepare the letter to the USCG requesting them to prepare and advertise a PPN. The letter to the USCG states that the project falls within an area that may require a Coast Guard Permit and requests them to prepare and advertise the PPN. If the project will require an Environmental Assessment (EA) or an Environmental Impact Statement (EIS), the letter should also request the USCG become a cooperating agency. A packet containing the information in the following list is sent to Mr. Hal Pitts, USCG Bridge Administrator by e-mail. His e-mail address is Hal.R.Pitts@uscg.mil
 - a. GIS mailing list
 - b. Background information
 - c. Vicinity map (do not use local SR numbers, provide road names)
 - d. Proposed main channel opening. Use words to describe, not a sketch.
 - e. 100 year flood elevation
 - f. Normal Water Elevation along with low and high tide if applicable
4. The USCG will advertise the Preliminary Public Notice for Navigational Opening and request interested parties to comment.
5. The USCG will inform NCDOT of the comments received (favorable or unfavorable). Note: The USCG will consider comments from the PPN to be valid for a limited, discretionary period; likely a 5 year period, to the start of construction. The request for the Preliminary Public Notice should be timed accordingly.
 - a. **Favorable comments** - the USCG will state that it is comfortable with NCDOT proceeding with the design as indicated. Proceed with the project. The PDE will add the following Greensheet Commitment to the project:
 - b. **Unfavorable comments** - NCDOT and the USCG will pursue coordination with the parties concerned. The PDE will coordinate further with NCDOT’s Hydraulics Unit, Structure Management Unit, Roadway Design Unit and USCG to address the concerns raised by the public during the comment period. The possibilities include but are not limited to:
 - i. Issues Resolved – Likely Advanced Approvalproceed to Advanced Approval Section below.
 - ii. Issues Resolved – Likely USCG Permit. Proceed to USCG permit Section Below
 - iii. Issues Unresolved – Likely USCG Permit – This represents a very small number of projects such as Gallant’s Channel in Beaufort or Grimesland where needs are identified by USCG by NCDOT cannot or will not agree to the conditions. These projects are typically elevated well above the project development section.

USCG Stream Coordination Map

The map below is a representation of a GIS based map. Water Depths are based on data NCDOT Bridge Maintenance databases. The dam layer (not shown on map below) is based on information from the DENR Land Quality NC Dam Inventory. The tidal areas (orange shaded areas) are a conservative estimation based on document by the U.S. Geological Survey and NC Department of Natural Resources in 1985 called Hydrology of Major Estuaries and Sounds in North Carolina and a corresponding map plotting the limits of the lunar tidal influence along major rivers. Please note that not all of the area identified as tidally influenced is in fact tidal. **If you have site specific information confirming that your site is not tidal, present it to FHWA and proceed through the flowchart with a non-tidal assumption.**



Programmatic Agreement - This agreement is currently in draft form but have been in practice since 2013 and will be finalized before distribution of these draft procedures.

11-22-13 DRAFT

Subject: Background information regarding a programmatic FHWA determination that a USCG permit is not required

Purpose:

The purpose of this documentation is to explain the process the FHWA NC Division office utilizes when making a determination that a US Coast Guard permit is not required. The FHWA NC Division has worked in conjunction with the NCDOT Bridge Section in developing the determination process. Since the FHWA NC Division has not delegated NCDOT the authority to communicate FHWA's determination that a UC Coast Guard permit is not required, any external communication in this regard will be sent directly by the FHWA NC Division. Coordination for projects that do not fit into the process described in this documentation will continue to be handled directly between NCDOT and US Coast Guard.

Background:

The United States Coast Guard approves bridge location and plans under the authority of Section 9 of the Rivers and Harbors Act of 1899 and the General Bridge Act of 1946. The purpose of these Acts is to preserve the public right of navigation and to prevent interference with interstate and foreign commerce. The General Bridge Act of 1946, as amended, the Rivers and Harbors Act of 1899, as amended, and the Act of March 23, 1906, as amended, all require that the location and plans of bridges and causeways across the navigable waters of the United States be submitted to and approved by the Secretary of Homeland Security prior to construction. The General Bridge Act of 1946 is cited as the legislative authority for bridge construction in most cases.

The bridge statutes and subsequent court interpretations require that bridges provide for the reasonable needs of navigation, not for all the needs of navigation. The reasonable needs of land traffic (highway and rail) must also be met. The construction of essential land transportation projects must not be unreasonably delayed while navigational impacts are under consideration.

FHWA Responsibility:

23 CFR 650.805 - Bridges not requiring a USCG permit.

(a) The FHWA has the responsibility under 23 U.S.C. 144(h) to determine that a USCG permit is not required for bridge construction. This determination shall be made at an early stage of project development so that any necessary coordination can be accomplished during environmental processing.

(b) A USCG permit shall not be required if the FHWA determines that the

proposed construction, reconstruction, rehabilitation, or replacement of the federally aided or assisted bridge is over waters (1) which are not used or are not susceptible to use in their natural condition or by reasonable improvement as a means to transport interstate or foreign commerce and (2) which are (i) not tidal, or (ii) if tidal, used only by recreational boating, fishing, and other small vessels less than 21 feet in length.

(c) The highway agency (HA) shall assess the need for a USCG permit or navigation lights or signals for proposed bridges. The HA shall consult the appropriate District Offices of the U.S. Army Corps of Engineers if the susceptibility to improvement for navigation of the water of concern is unknown and shall consult the USCG if the types of vessels using the waterway are unknown.

(d) For bridge crossings of waterways with navigational traffic where the HA believes that a USCG permit may not be required, the HA shall provide supporting information early in the environmental analysis stage of project development to enable the FHWA to make a determination that a USCG permit is not required and that proposed navigational clearances are reasonable.

(e) Since construction in waters exempt from a USCG permit may be subject to other USCG authorizations, such as approval of navigation lights and signals and timely notice to local mariners of waterway changes, the USCG should be notified whenever the proposed action may substantially affect local navigation.

Conclusion:

The NCDOT Bridge Section, in coordination with the FHWA NC Division has developed a "USCG Stream Coordination Map". It is a GIS base map that allows for a streamlined evaluation of projects relative to USCG Permit Interests. It draws off of data from research by the US Geological Service in addition to data collected by the NC Department of Water Resources.

The map shows the state separated into 3 specific areas: "Dam Limited", "Depth Limited", and "Tidally Influenced". The "Dam Limited Area" is shaded yellow on the map. The "Depth Limited Area" is shaded green on the map. And the "Tidally Influenced Zone" is shaded orange on the map. Additionally, unobstructed waters with a depth of 5 feet or more are shown in red.

Applicable projects in / over waterways that are in either the "yellow" or "green" areas and are not associated with "red" designated waters, are determined by FHWA NC Division not to require a US Coast Guard construction permit.

A waterway is coded "yellow" or "green" on the attached map either by virtue of the depth of water, or the susceptibility of the waterway to support the transport of interstate or foreign commerce.

From a conservative perspective, a waterway that is less than 5 feet in depth is not susceptible to support the transport of interstate commerce. Therefore, the FHWA NC Division office has concluded that bridge construction, reconstruction, rehabilitation, or replacement projects over North Carolina waterways where the normal pool depth, or low tide depth is 5 feet or less, do not require a US Coast Guard construction permit. In addition, non-tidal interstate waterways restricted by permanent structures such as dams or low clearance bridges are determined not to be susceptible to support the transport of interstate or foreign commerce, and are therefore determined to not require a US Coast Guard construction permit.

Approval:

Director of Preconstruction and Environment, FHWA NC Division Office

References:

USCG Bridge Permit Application Guide

http://www.uscg.mil/hq/cg5/cg551/BPAG_Page.asp

USCG Bridge Admin Manual

http://www.uscg.mil/directives/cim/16000-16999/CIM_16590_5C.pdf

USCG-FHWA Streamlining Procedures:

<http://nepa.fhwa.dot.gov/ReNEPA/ReNepa.nsf/docs/3465560306318DF285256B36004E0E16?opendocument&Group=Environmental%20Streamlining%20and%20Stewardship&tab=REFERENCE>

USCG Memo:

[http://nepa.fhwa.dot.gov/ReNEPA/ReNepa.nsf/All+Documents/3465560306318DF285256B36004E0E16/\\$FILE/File%20%20USCG-FHWAAcoord.pdf](http://nepa.fhwa.dot.gov/ReNEPA/ReNepa.nsf/All+Documents/3465560306318DF285256B36004E0E16/$FILE/File%20%20USCG-FHWAAcoord.pdf)

Example E-mail – USCG Exemption

Sample Language for E-mail.

NCDOT is planning project B-4565; the replacement of the pair of Queen Street Bridges (42 and 43) over the Neuse River in Kinston, N.C. in 2015 (see map below). These bridges are approximately 46 miles upstream of Bridge 231 in New Bern (see map). The location in Kinston is not tidally influenced. Tidal influence ends midway between Kinston and New Bern. The bridges are not presently used for commerce nor have any local, state or federal officials indicated the desire to use it as such. There is presently light recreational use of the river at this location.

Types of boats seen in and around the Queen St. Bridges have been mostly bass fishing boats (14'-18'). There is one 18' V-hull center console fishing boat occasionally seen. NCDOT Bridge Maintenance uses a 16 foot, 40hp modified V-hull aluminum boat to retrieve drift at these bridges.

Normal water depth at this location is 5 feet. The vertical clearance from water surface to bottom of bridge is 23 feet. Horizontal clearance between bents is 41 feet.

Our proposed structure(s) would maintain the vertical clearance and increase the horizontal spacing between bents.

With a commitment to maintain the existing opening we believe this may qualify for a USCG Exemption. Please review and let me know if you agree with this assessment.

I'll touch base with you by phone on Friday (March 8th) if you haven't had the opportunity to respond before then.

Thanks,
John Williams

Example E-mail – No USCG, Non Tidal

The language for a standard e-mail is as follows:

Good Morning Mr. Pitts,

Attached you will find a spreadsheet and map identifying projects which Federal Highways Administration has determined do not need a Coast Guard Permit under 23 USC 144(h) nor do they require navigational lighting. The spreadsheet provides the supporting reasons behind each decision. Please let me know if you have any concerns regarding the information attached.

Thanks

Earl Dubin, P.E.
Structural Engineer
FHWA North Carolina Division

Snapshot from referenced spreadsheet

FHWA Determination - No USCG Permit Required									
PROJECT	General Location	River Basin	Bridge Over	COUNTY	Tidal	Water Depth (ft)	Comments	Conclusion	LET
B-5332	Coastal Plain	Lumber	Cedar Creek	Columbus	no	6	water depth 6.0 feet at bridge but drains to an large wetland system 4 miles downstream with water depth of only 2 feet	not used nor suceptible for use for interstate commerce, no further action necessary	Dec-2017
B-5362	Piedmont	Lumber	Drowning Creek	Montgomery	no	2	small stream with no commerical potential and only occasional recreational use	not used nor suceptible for use for interstate commerce, no further action necessary	Oct-2017
B-4544	Piedmont	Cape Fear	Black River & Black River Overflow	Harnett	no	7 & 3	Two bridges at this location. The 7 foot depth is the result of a scour hole. There are bridges are just downstream which have a water depth of 3 feet	not used nor suceptible for use for interstate commerce, no further action necessary	Feb-2018
B-4550	Piedmont	Cape Fear	Rockfish Creek	Hoke	no	4	small stream with no commerical potential and only occasional recreational use	not used nor suceptible for use for interstate commerce, no further action necessary	Apr-2018
B-4608	Piedmont	Cape Fear	Fork Creek	Randolph	no	1	upstream of Randleman Lake Dam	not used nor suceptible for use for interstate commerce, no further action necessary	Dec-2016
B-4620	Coastal Plain	Cape Fear	Ashpole Swamp	Robeson	no	7	water depth - 7.0 feet, however, the stream feeds a large wetland system where the depths run as shallow as 4 feet.	not used nor suceptible for use for interstate commerce, no further action necessary	Apr-2018
B-4637	Coastal Plain	Cape Fear	Little Coharie Creek	Sampson	no	1	small stream with no commerical potential and only occasional recreational use	not used nor suceptible for use for interstate commerce, no further action necessary	Nov-2017
B-4729	Piedmont	Cape Fear	Prong of Rocky River	Chatham	no	1	upstream of small pond dam	not used nor suceptible for use for interstate commerce, no further action necessary	Jan-2018

Snapshot of USCG Stream Coordination Map

